That which is claimed is:

1. A composition comprising a culture of replicating macrophages wherein at least some of the macrophages have undergone cell division during culture *in vitro*.

2. The composition of claim 1 wherein said replicating macrophages have undergone cell division during culture *in vitro* for at least one month.

3. The composition of claim 1 wherein said replicating macrophages have undergone cell division during culture *in vitro* for at least four months.

4. The composition of claim 1 wherein said replicating macrophages are phagocytic.

5. The composition of claim 1 wherein said replicating macrophages stain positive for non-specific esterase and acid phosphatase.

6. The composition of claim 1 wherein said replicating macrophages express CD68

7. The composition of claim 1 wherein said replicating macrophages do not express TGFβ.

8. The composition of claim 1 wherein said replicating macrophages are Kupffer cells.

9. The composition of claim 1 wherein said replicating macrophages are human macrophages.

10. The composition of claim 1 wherein said replicating macrophages are non-transformed.

11. The composition of claim 1 wherein said replicating macrophages are from a tissue source other than a tumor.

12. The composition of claim 1 wherein said replicating macrophages are from a non-embryonic animal.

13. A method of culturing macrophages *in vitro* such that at least some of the macrophages have undergone cell division during culture, said method comprising growing the cells in basal culture medium comprising inorganic salts, amino acids, vitamins, at least one carbohydrate or metabolic product thereof and further comprising animal serum and IL-1 or IL-2.

14. The method of claim 13 wherein said culture medium further comprises dimethyl sulphoxide and hydrocortisone.

15. The method of claim 13 wherein said culture medium further comprises heparin.

16. The method of claim 13 wherein said animal serum is fetal calf serum.

17. The method of claim 13 wherein said culture medium comprises IL-2.

18. The method of claim 13 wherein said macrophages are human macrophages.

19. The method of claim 13 wherein said macrophages are Kupffer cells.

20. The method of claim 19 wherein said Kupffer cells are isolated from human liver by needle biopsy.

21. The method of claim 19 wherein said Kupffer cells are isolated from liver of an individual suffering from a liver viral infection.

22. The method of claim 21 wherein said Kupffer cells are not virally infected.

23. The method of claim 13 wherein said macrophages continue to replicate for at least one month.

24. The method of claim 13 wherein said macrophages continue to replicate for at least four months.

25. The method of claim 13 wherein said replicating macrophages are non-transformed.

26. The method of claim 13 wherein said macrophages are from a tissue source other than a tumor.

27. The method of claim 13 wherein said macrophages are from a non-embryonic animal.

28. A composition comprising replicating Kupffer cells prepared by the method of claim 13.

29. A method of enhancing or extending immune or organ function in an individual suffering from a deficiency relating to a reduced number of functional macrophages in a tissue or organ, said method comprising administering a therapeutically effective amount of the macrophages of claim 1.

30. The method of claim 29 wherein said individual is a human.

31. The method of claim 29 wherein said organ is liver.

32. The method of claim 29 wherein said macrophages are Kupffer cells.

33. The method of claim 29 wherein said deficiency is due to hepatitis C virus infection.

34. A method of enhancing or extending immune or organ function in an individual suffering from a deficiency relating to a reduced number of functional

macrophages in a tissue or organ, said method comprising administering a therapeutically effective amount of the macrophages of claim 28.

35. The method of claim 34 wherein said individual is a human.

36. The method of claim 34 wherein said organ is liver.

37. The method of claim 34 wherein said macrophages are Kupffer cells.

38. The method of claim 34 wherein said deficiency is due to hepatitis C virus infection.